Installation instructions

Rev.06/08 ENG

8500V-Rol/ DUCATI UP 70 (CTH29E)

Garage door automation system 70 kg

100 kg
max. 8 m²

Power supply
230 V/ 50 Hz W60

Motor
8–24 V dc

Operating temperature
-10 °C / + 50 °C

Opening/closing time
11–18 sec.

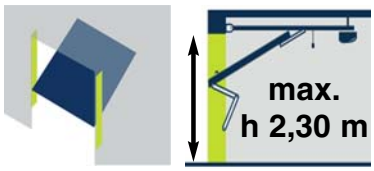
GARANZIA 2 Ans

RoHS CE

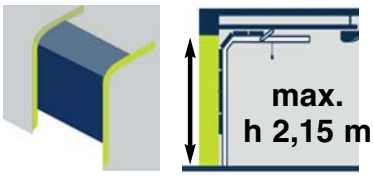
MADE IN ITALY

MAXIMUM HEIGHT OF DOOR

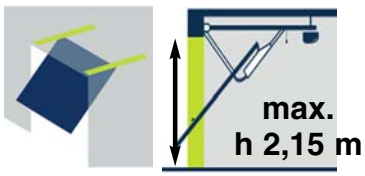
Retractable door



Sectional door



Canopy door



IMPORTANT:
The door must slide smoothly and be well balanced.

Read all of these instructions carefully before commencing installation. For any further information, please contact the manufacturer: Allducks

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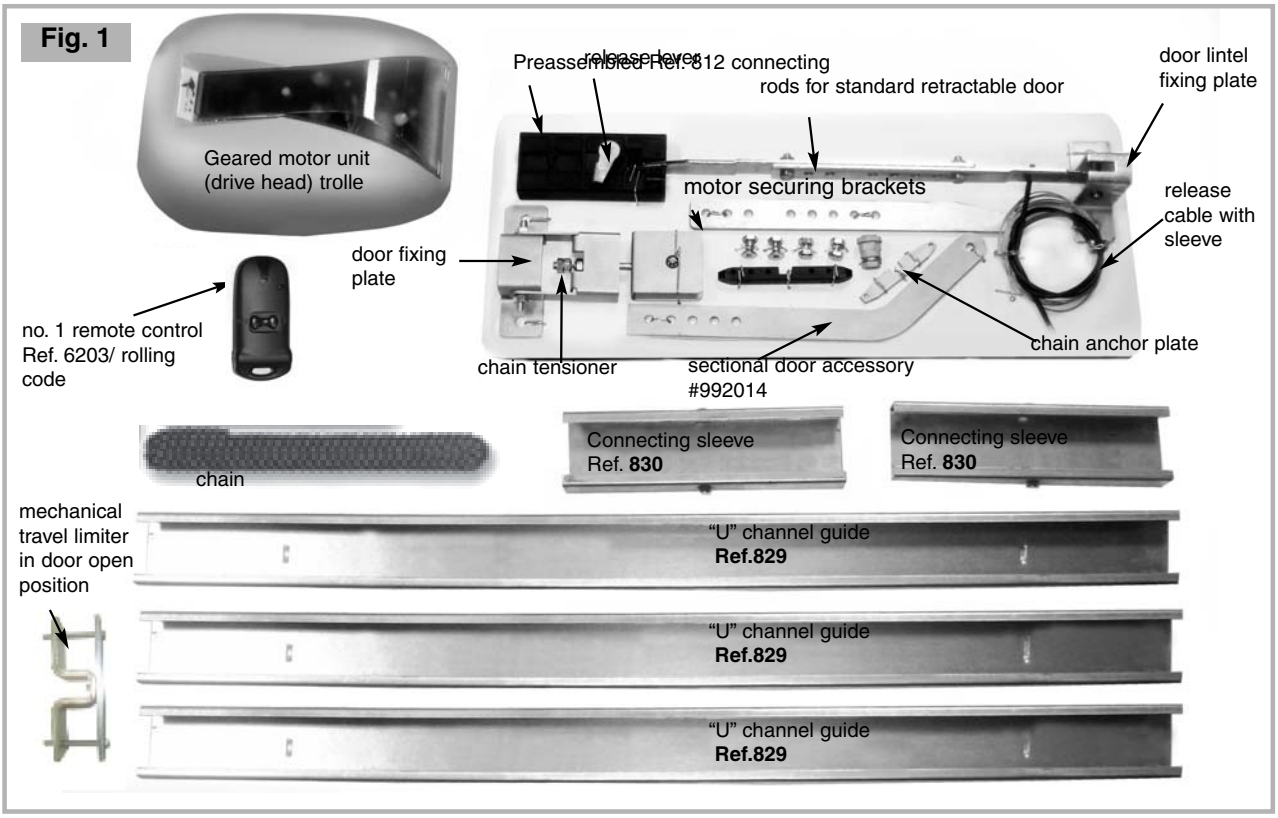
1. Contents of kit UP70

8500V-UP 70 -UP70 kit
Geared motor unit 24V d.c.
CTH29E circuit board
1 x 2-channels rolling code 433 MHz remote control
Chain drive
270 cm “U” channel rail (3 x 90 cm) + 2 sleeves
manual release system
Nuts and bolts and preassembled accessories
Installation instructions

Fig. 1



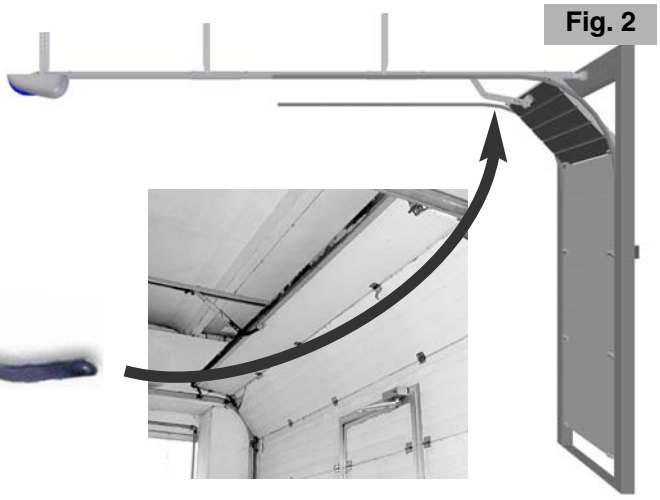
2.Technical data

	kit UP 70
Power supply* (Vac 50/60/Hz)	230V
Lifting force (N)	70
Absorbed power (W)	80
Toroidal transformer	105W
Protection fuse	0.8A T
Radio frequency	433 MHz
Speed (m/sec.)	0.15
Operating temperature (°C min/max)	-10/+50
Courtesy light	Yes
Amperometric safety system	Yes
Power adjustment	with trimmer
End of travel	amperometric detection + end of travel open position

3. Types of door

3.1 Sectional door

Fig. 2



For installation on a sectional door, it is necessary to use accessory Ref. 992014, which is supplied in the kit. Install the accessory on the door fixing plate to replace one of the two preassembled Ref. 812 connecting rods for standard retractable doors.

Sectional door accessory: Ref. 992014 is supplied in the kit

IMPORTANT:
La port doit avoir un mouvement glissant, et être bien équilibrée!

3.2 Retractable door

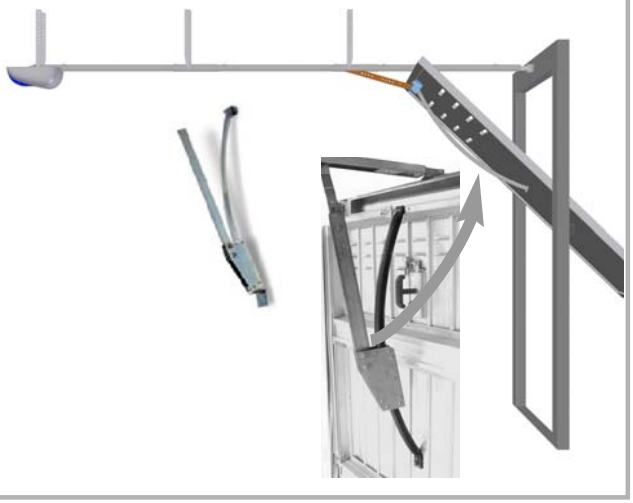
Fig. 3

For installation on a retractable door, no additional accessory is required.

IMPORTANT:
The door must slide smoothly and be well-balanced!

3.3 Canopy door

Fig. 4



For installation on a canopy door, it is necessary to add optional accessory: Ref. 992012*

The canopy door accessory Ref. 992012 must be purchased separately and is not included in the kits. Specific installation instructions are supplied with the accessory.
This item can also be purchased on the www.allducks.it website, in the accessories section.

IMPORTANT:
The door must slide smoothly and be well-balanced!

4. Installation criteria

To fix the automation system's "U" channel rail it is necessary to have a minimum clearance of 5 cm between the ceiling and the space through which the door moves.
A minimum distance of 1 cm is necessary between the position of the "U" channel rail and the space through which the door moves. See fig. 7

Fig. 5

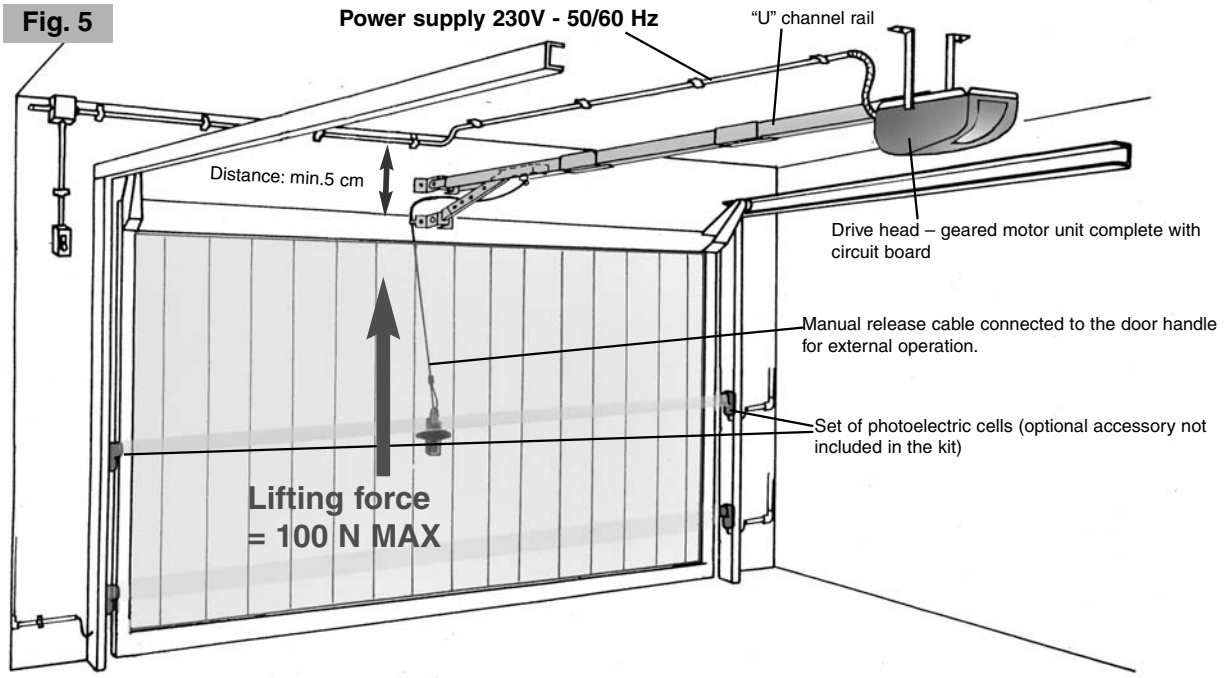

Power supply 230V - 50/60 Hz
"U" channel rail
Distance: min.5 cm
Drive head – geared motor unit complete with circuit board
Manual release cable connected to the door handle for external operation.
Set of photoelectric cells (optional accessory not included in the kit)
Lifting force
= 100 N MAX

Fig. 6 **MAXIMUM DOOR HEIGHT**

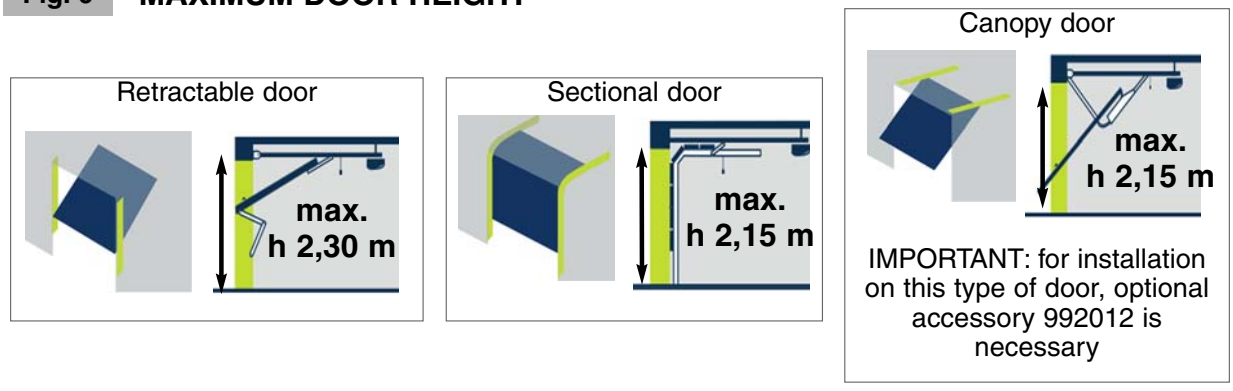
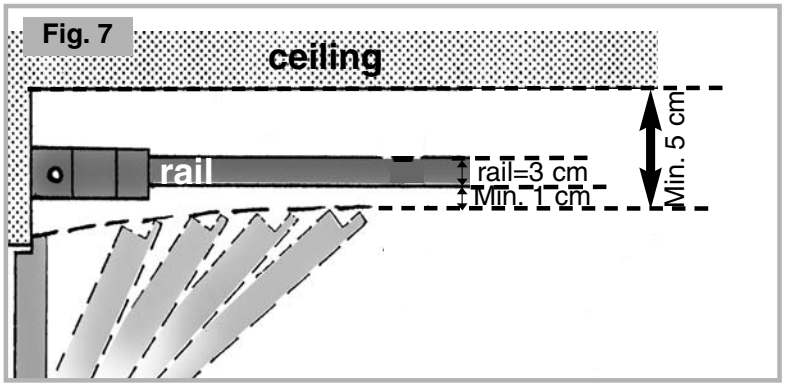
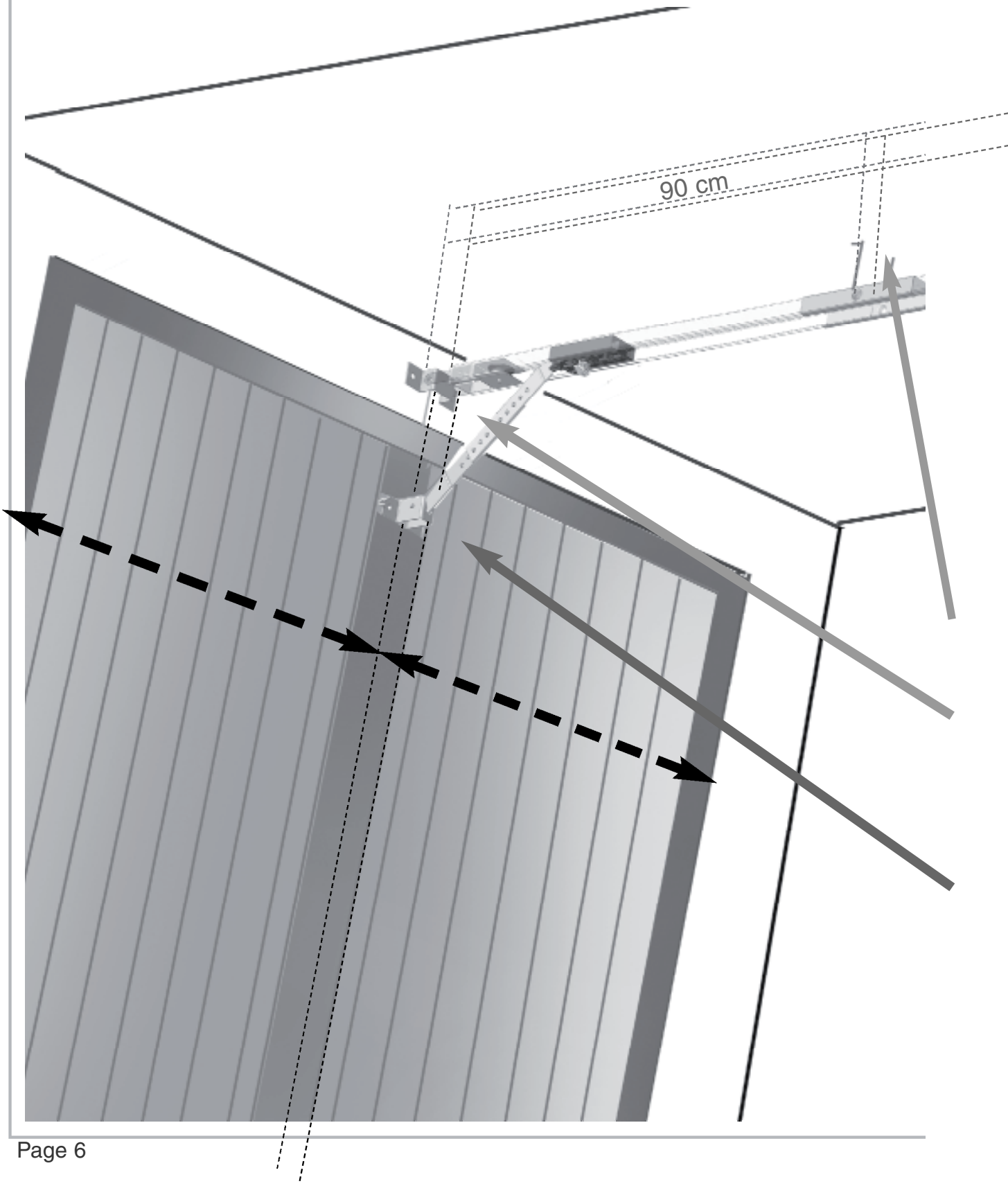


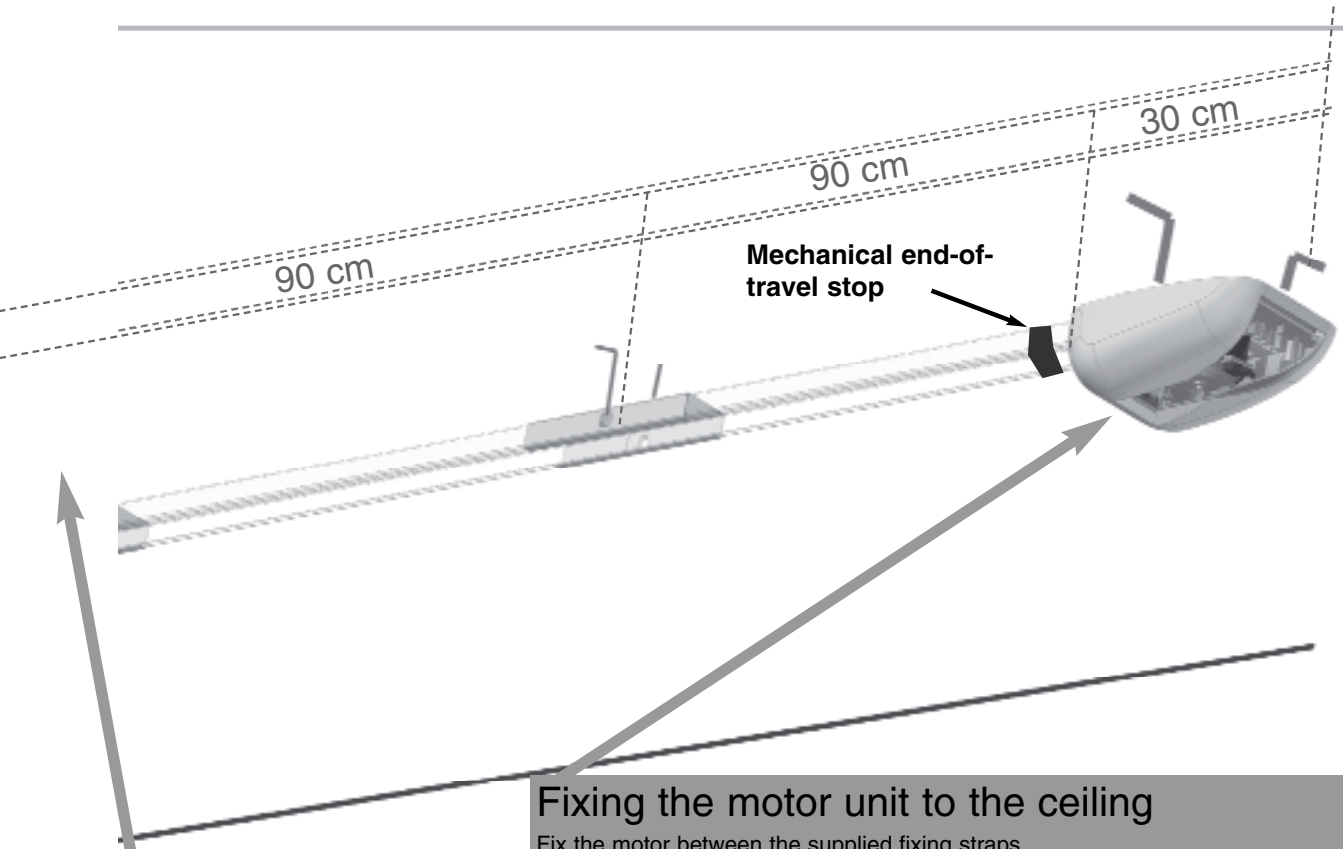
Fig. 7



5. Installation diagram

Fig. 8





Fixing the motor unit to the ceiling

Fix the motor between the supplied fixing straps.
The motor unit must be fixed to the ceiling so that the “U” channel rail is as horizontal as possible.
Position the motor centrally with respect to the width of the garage door.

Additional rail support

The rail connecting sleeves Ref. 830 have lateral holes for additional fixings to the ceiling using a cable or a steel strap (not supplied).

Fixing to the door lintel

The fixing plate must be fixed to the door lintel or the wall.
It is important that the structure in the fixing area be strong and sturdy.
Choose a position on the vertical line corresponding to half the door width. Ensure that you allow sufficient clearance so that the moving door does not come into contact with the rail. See fig. 7

Fixing to the door

The fixing plate must be fixed to the door.
It is important that the structure in the fixing area be strong and sturdy.
Choose a position on the vertical line corresponding to half the door width.
IMPORTANT:
In the case of a sectional door, it will be necessary to use the 992014 accessory, which must be connected to the door fixing plate to replace one of the two preassembled Ref. 812 connecting rods for retractable doors. (see page 4)
In the case of a sectional door, it will be necessary to use accessory 992012 (see page 4), which must be connected to the door fixing plate. Specific instructions are supplied with accessory 992012.

6. Assembly instructions

6.1 Assembly of the “U” channel rail

Connect the 3 pieces of “U” channel rail (Ref. 829) using the connecting sleeves Ref. 830.
See Figs. 9-11

Fig. 9

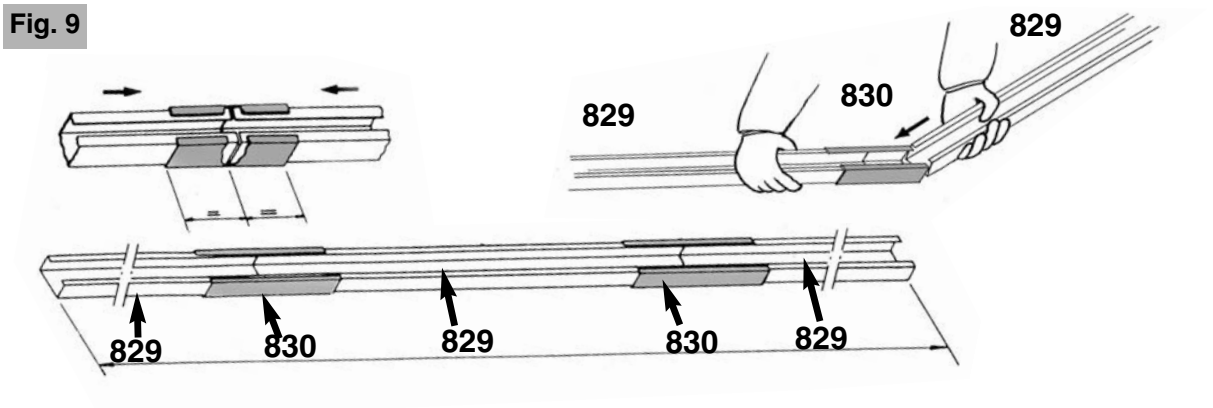


Fig. 10

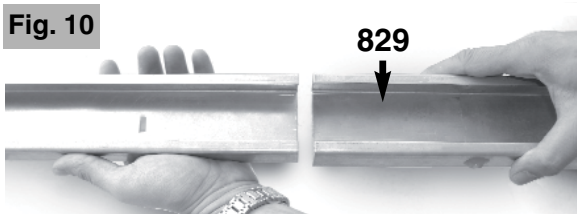
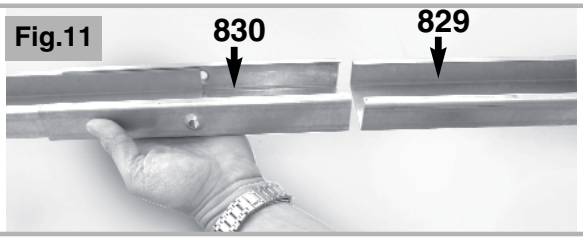
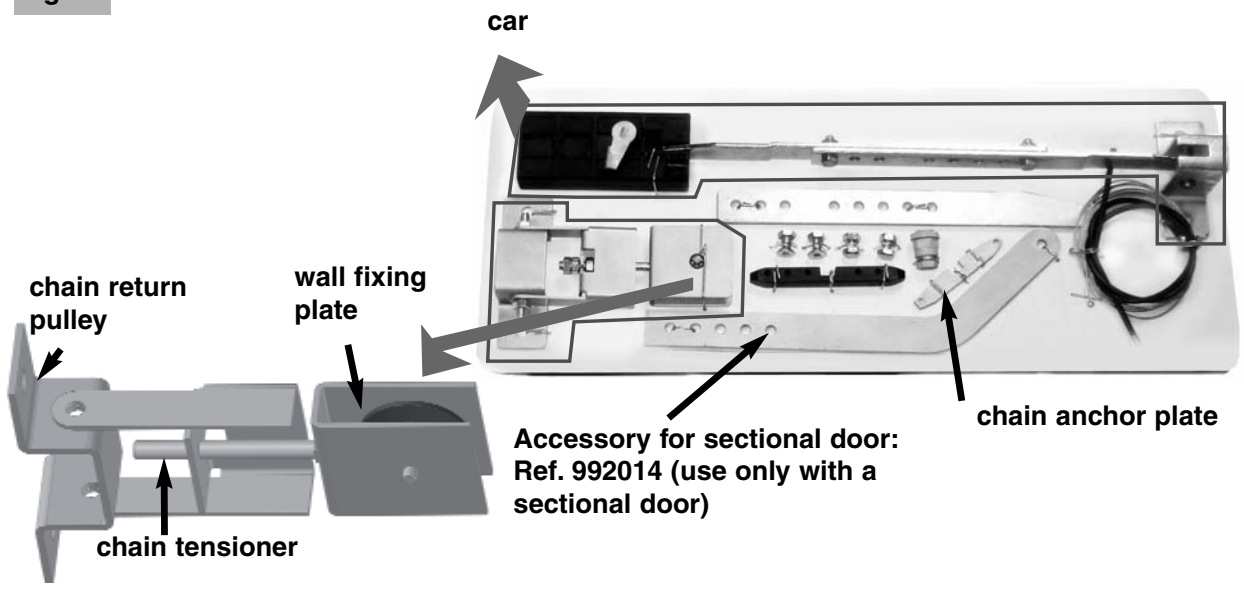


Fig.11



6.2 Return pulley and preassembled accessories

Fig. 12


car
chain return pulley
wall fixing plate
chain tensioner
Accessory for sectional door: Ref. 992014 (use only with a sectional door)
chain anchor plate

6.3 Assembly of the chain

Feed the chain Ref. **818** through the car as shown in Figs. 13-14. Pay particular attention to the direction shown in Figs. 13-14. Pass the chain around the return pulley.
Connect the chain as shown in the photo.
IMPORTANT: The chain anchor plate (Ref. 819) must connect the chain in a specific position between the pulley and the car, on the side of the car opposite the release lever. The notch in the anchor plate must face inwards, as shown in fig. 14
Introduce the chain, the car and the other assembled components into the "U" channel rail. See Figs. 15-16.
The chain anchor plate ref. 819 must be located 13 cm from the centre of the return pulley.

Fig. 13

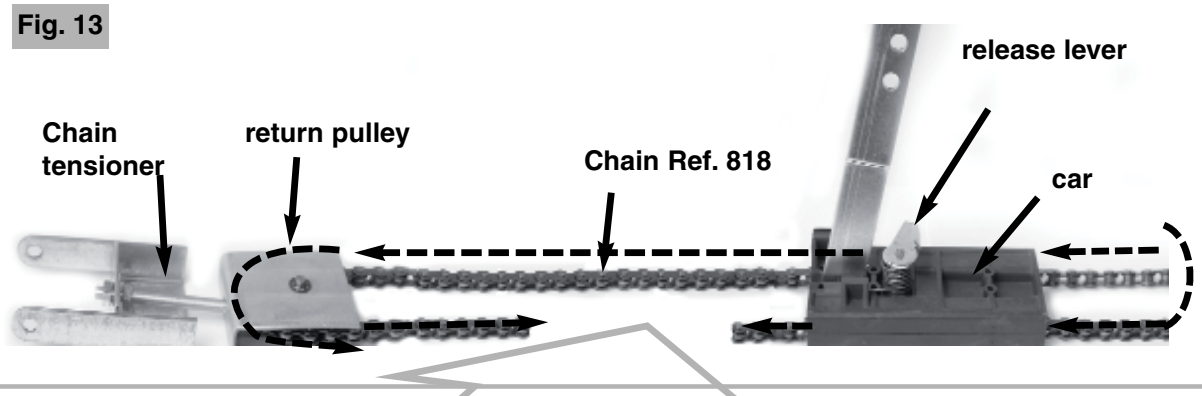


Fig. 14

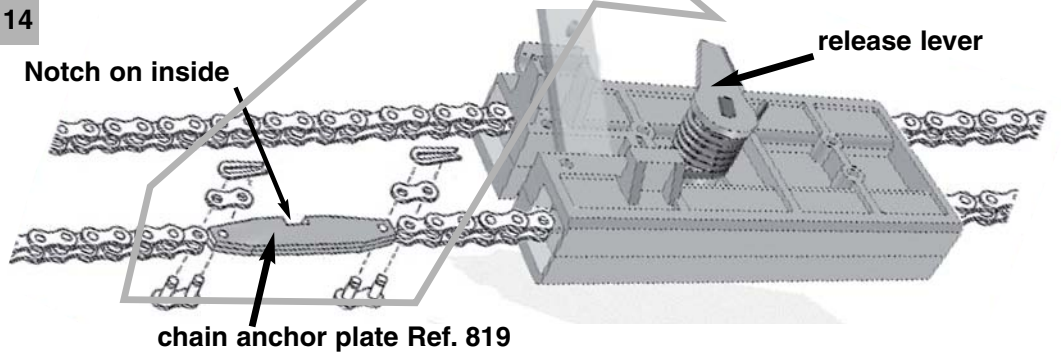


Fig. 15

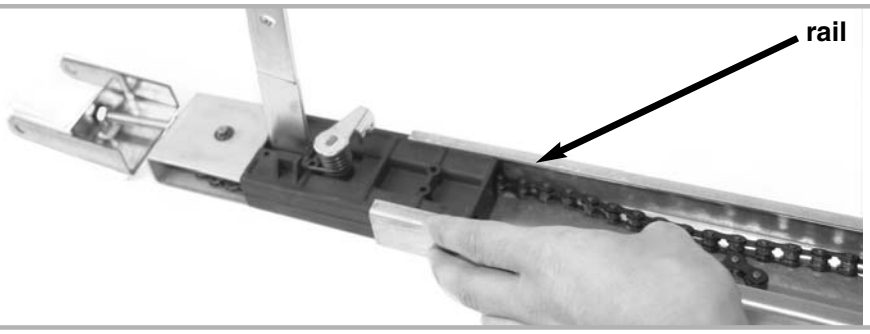
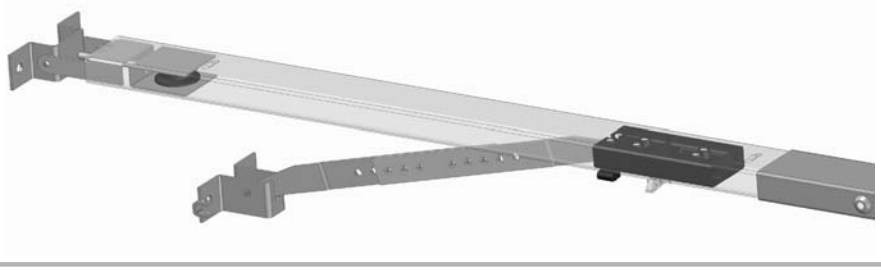


Fig. 16



6.4 Assembly of the drive plate

Insert the rail into the motor unit positioning guides and pass the chain ref. 818 around the sprocket wheel. See Fig 17-19.

Fig. 17

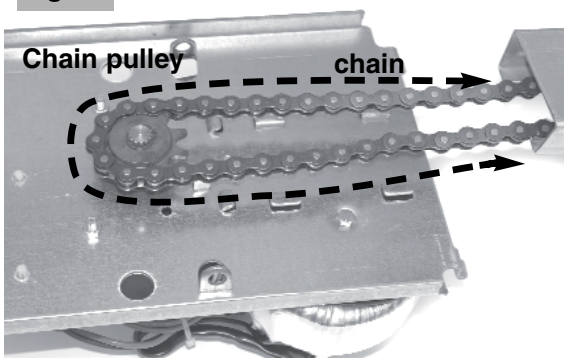


Fig. 18

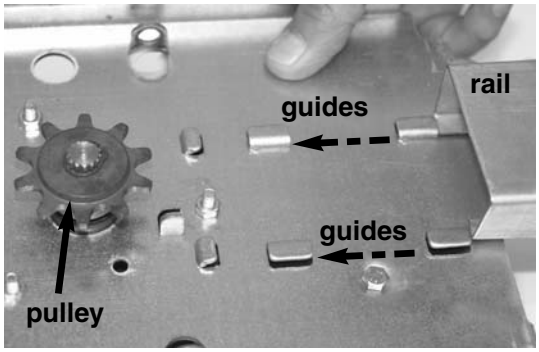


Fig. 19

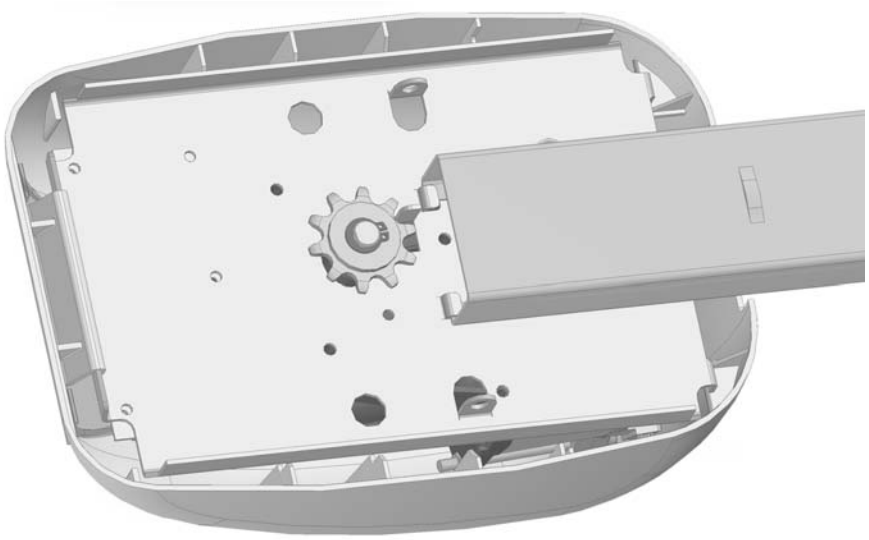


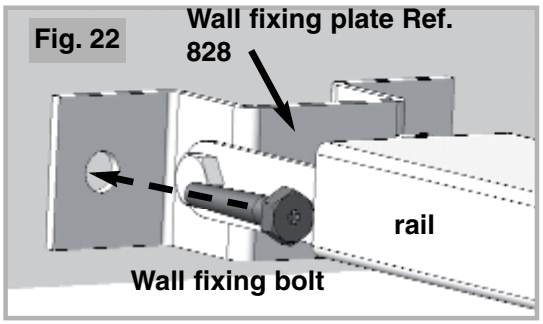
Fig. 20

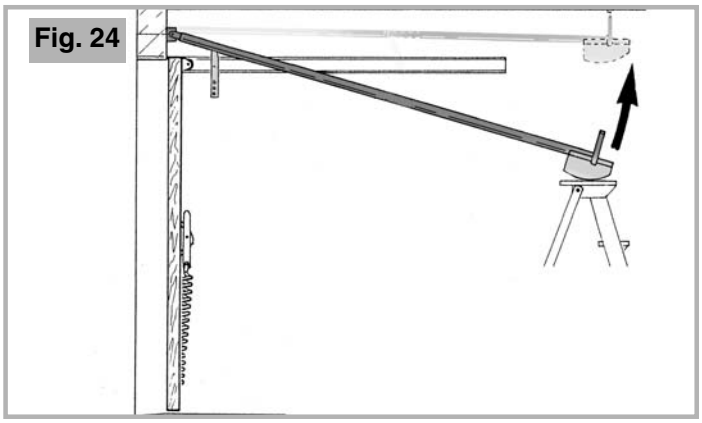
Fig. 21

7. Fixing instructions

7.1 Fixing to door lintel

Fixing plate 828 must be fixed to the door lintel or the wall using 2 bolts (not supplied) in a vertical position equivalent to half the width of the door. Ensure that you allow sufficient clearance so that the moving door does not come into contact with the rail. See also Fig. 7
It is important that the structure in the fixing area be strong and sturdy. If necessary, reinforce it with a steel plate.

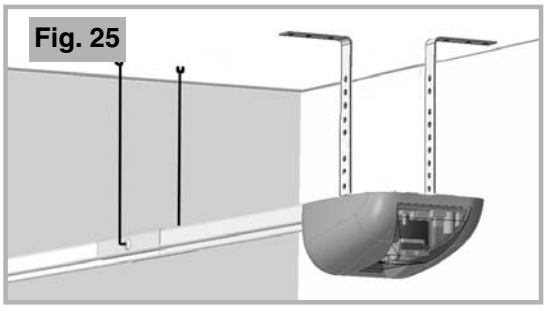


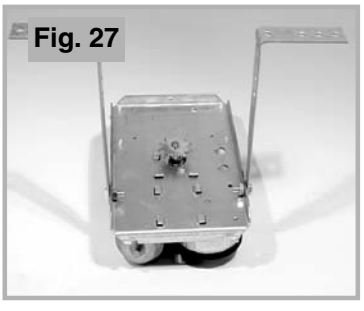


Support the door-opener in a horizontal attitude until it can be permanently installed (Fig. 24).

7.2 Fixing the drive head

Fix the motor unit to the ceiling with the two securing brackets, bending the ends at 90°. Fixing the rail to the ceiling is optional, but it is recommended if using accessory 992012 (canopy door) to prevent excessive flexing of the rail.
In this case, use cables to support the rail in a horizontal attitude. The cables (not supplied) can be connected to the rail connecting sleeves between the lateral holes.





7.3 Fixing to the door

Drill 2 holes in the door's upper rail, if possible at its strongest point, using the wall fixing plate ref. 828 as a drilling guide.
This component must be fixed in the exact horizontal centre of the door.
Adjust the connecting rods ref. 812 to the most suitable length using the holes (Fig. 29).
Perform these operations with great care, ensuring perfect alignment with the slide rails.
Tension the chain moderately by turning the nut.

Open the door until the sliding car engages with the connecting plate (ref. 819 = chain anchor plate)
- Then remove the door locking bars.

Fig. 28

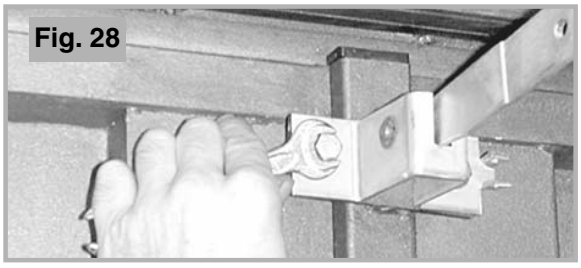
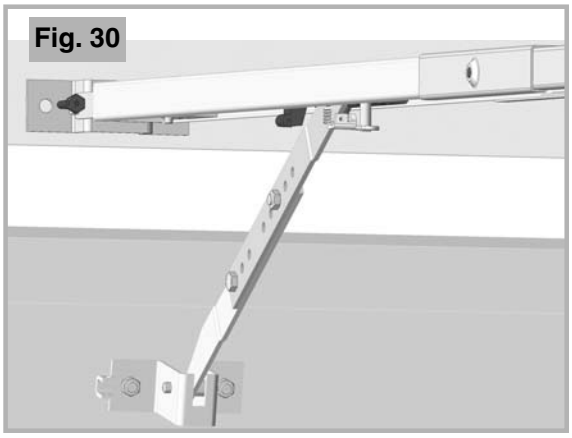


Fig. 29

Fig. 30



IMPORTANT:
Operate the system manually to check the satisfactory mechanical operation of the system.

To install the system on sectional type doors, use connector ref. 992014 to replace the standard connecting rod ref. 812 supplied.
Perform the replacement by removing the spindle and inserting connector 992014.

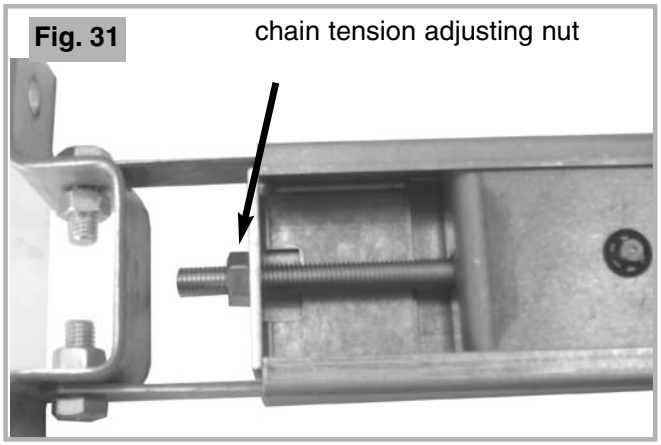
To install the system on counterweighted/canopy type doors, install optional accessory ref. 992012 ensuring a 4 cm (1 1/2") drop between the drive head and the wall fixing plate ref. 828.

Mechanical installation is now complete.

7.4 Chain tensioner

Once the automation system is installed, tension the chain moderately.
To adjust the chain tension, turn the nut.

Fig. 31 chain tension adjusting nut



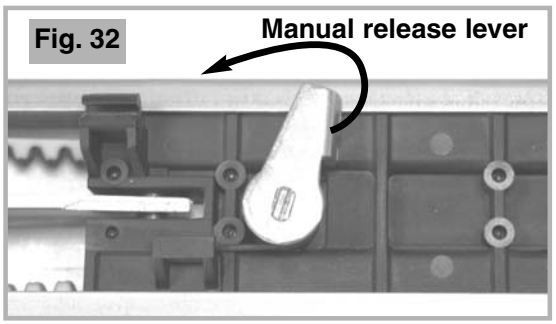
8. Manual release

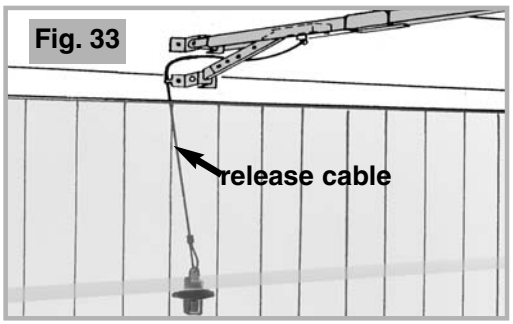
An emergency manual release system is supplied for manual operation of the door. Comprising a steel cable and sleeve, it must be connected to the car and to the door handle. Pass the steel cable through the lug on the car and slide it into the sleeve (Fig. 34). Pass the cable and the sleeve through the holes in the door fixing plate (Fig. 36) and secure the cable as shown in fig. 37.

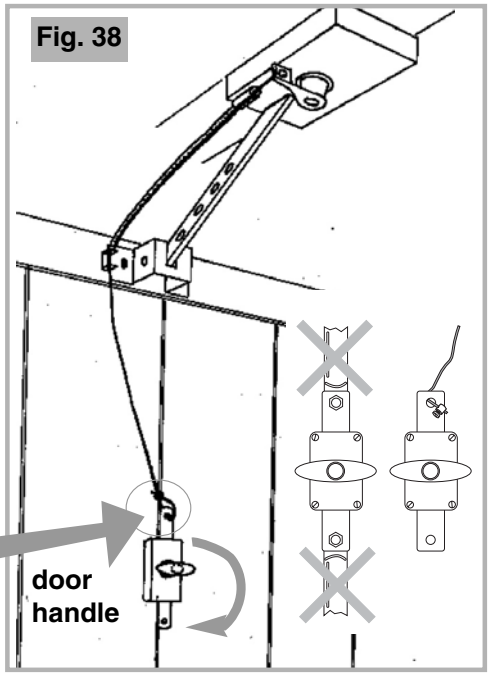
To release, turn the door handle anti-clockwise

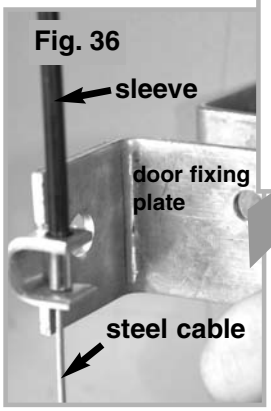
To lock, move the door manually until the chain anchor plate Ref. 819 locks into the car (this will happen automatically when moving the door)

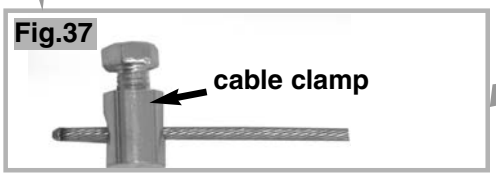
WARNING: to operate the door using your radio remote control, the chain anchor plate must be engaged in the car!











9. Adjusting the mechanical end-of-travel stop

Open the door manually to the desired maximum opening position.
At the car's position on the rail, fix the mechanical end-of-travel stop as shown in the following drawings.
Important: tighten securely so that the end-of-travel stop does not move. When the end-of-travel stop is correctly positioned, tighten the small central set screw (figs. 40-41).
When you operate your automation system, the door will close when the car touches and presses on the open position end-of-travel stop.

Fig. 39

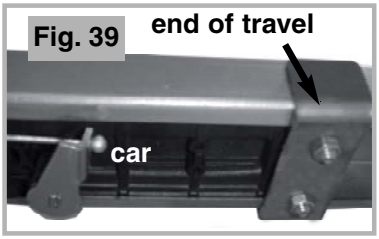


Fig. 40

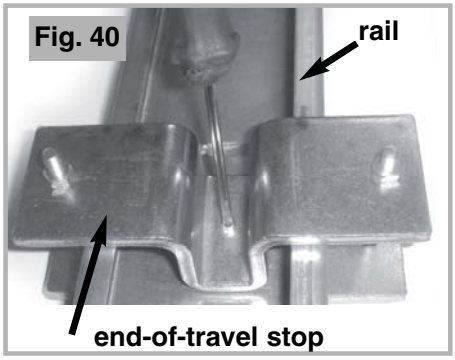
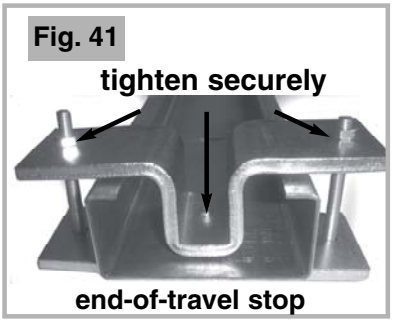


Fig. 41



10. 230V power supply connection

IMPORTANT: before operating the door electrically ALWAYS ensure that the mechanical components, the car and the anchor plate (see page 13) are engaged. The door must be in neither the open nor the closed position.
Remove the plastic cover as shown in Figs. 42-43
Connect the 230 V 50/60 Hz power supply cable to the terminal located on the transformer.
See Fig. 44-45-46
A protection fuse is installed to protect the circuit board and the system. For your safety, it is essential to use a cable clamp positioned where the cable passes through the hole in the steel plate supporting the motor. See Fig. 46

IMPORTANT. DANGER: the 230V high voltage connection must only be performed by a certified professional electrician.

Fig. 42

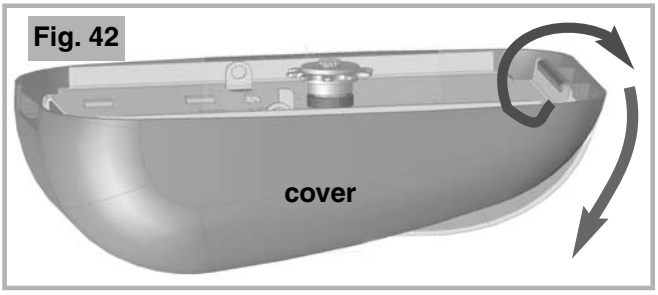


Fig. 43

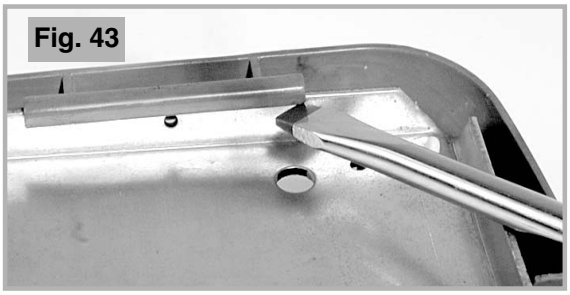


Fig. 44

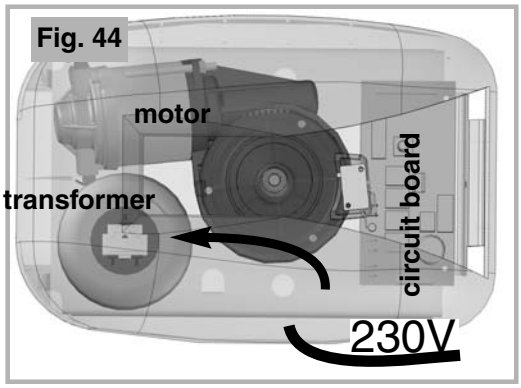


Fig. 45

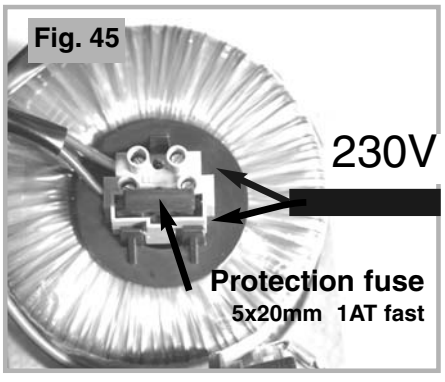
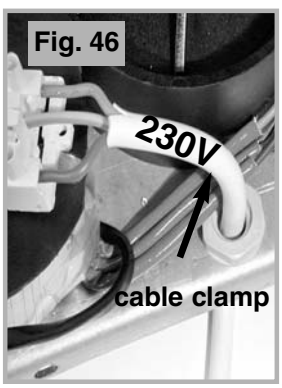


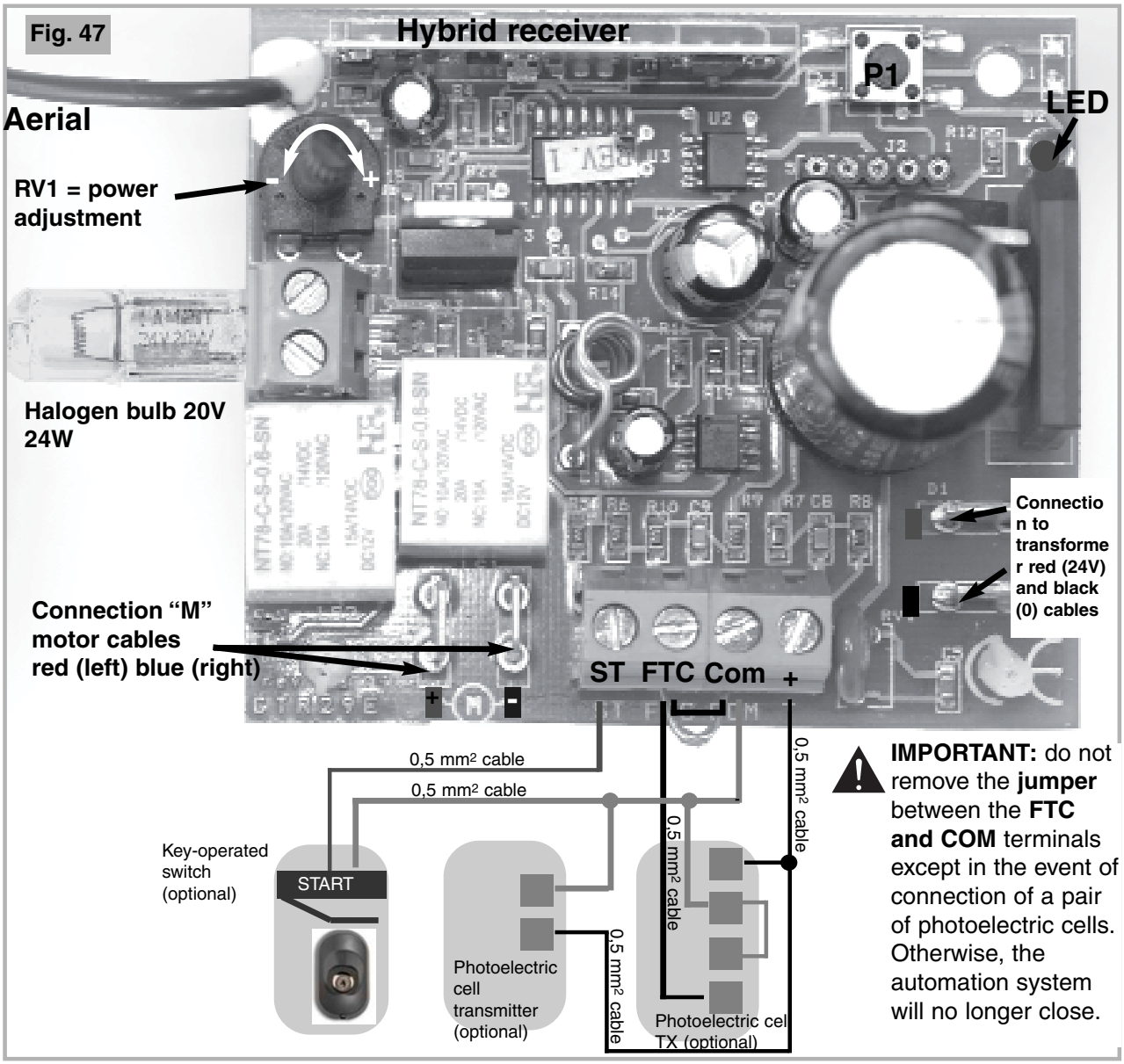
Fig. 46



11. CTH29E circuit board

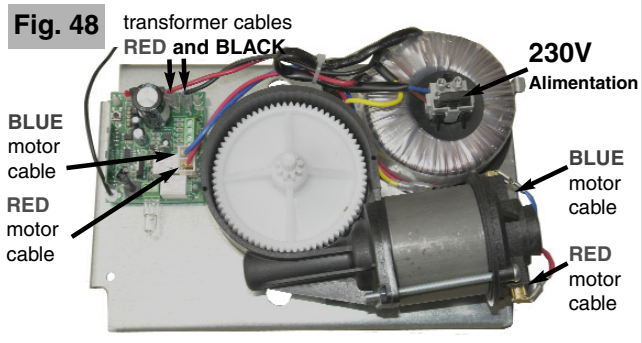
This circuit board is equipped with an amperometric safety system.
If an obstacle is detected, it stops movement.
It automatically stops movement in opening and closing directions (amperometric detection).
Connection for optional accessories: Photoelectric cells (Ref. SW7012); key-operated switch (Ref. SW5000).

Fig. 47


Hybrid receiver
Aerial
P1
LED
RV1 = power adjustment
Halogen bulb 20V 24W
Connection to transformer red (24V) and black (0) cables
Connection "M" motor cables red (left) blue (right)
ST FTC Com +
0,5 mm² cable
0,5 mm² cable
0,5 mm² cable
0,5 mm² cable
0,5 mm² cable
Key-operated switch (optional)
START
Photoelectric cell transmitter (optional)
Photoelectric cel TX (optional)
IMPORTANT: do not remove the jumper between the FTC and COM terminals except in the event of connection of a pair of photoelectric cells. Otherwise, the automation system will no longer close.

P1 = storage/erasure of codes for the remote control or the radio keypad (optional accessory)
LED = Red light. Power supply on and indicator for radio code storage
RV1 = power adjustment trimmer
M = connection to motor
ST = start n.o.(contact normally open)
FTC = n.c. photoelectric cells (contact normally closed)
Com = common
+ = power 24V
IMPORTANT: if the optional photoelectric cells have not been connected, the jumper connecting FTC and COM must be in place. Otherwise, the automation system will no longer close!

Fig. 48



12. Ref. 6203 Rolling radio remote control

The Ref. 6203 Rolling remote control incorporates 3 radio transmission channels, corresponding to:
1st channel = ON button
2nd channel = OFF button
Each transmission channel, and therefore each button, transmits a unique factory-set code on radio frequency 433 MHz, using the coding system known as “rolling code”.
Each button can be used to operate a different drive unit in the DUCATI range.

The code, which is secret and cannot be copied, is determined automatically from a choice of more than a billion possible combinations.
This system ensures that only your remote control will be able to open your automatic door.

A) Store the transmission code in your automation system:

- First check that the 230V power supply is connected and that the protection fuse is in good condition.- The door must not be moving,

1) **Press the P1 key on the automation system circuit board for 1 second.**
   The red LED illuminates with a steady light.
2) **Release the P1 key**
3) **Within 8 seconds, hold down the key on your remote control (6203 rolling) that you wish to use to operate the automation system.**
   The circuit board’s red LED will flash once, then it will remain illuminated and will extinguish after a few seconds
4) **Press again on the remote control to initiate operation**

- your remote control has been stored in the automation system circuit board memory.

IMPORTANT: The circuit board memory can store a maximum of 10 different codes.

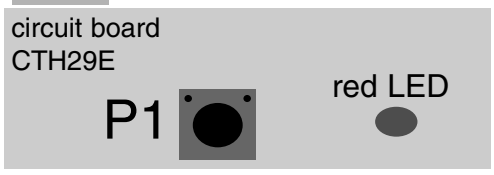
B) Erase the circuit board memory (total erasure of memory):

If the memory is full or if you lose a remote control, the memory must be erased (all the codes will be erased) and all the codes must be reinput into the circuit board.

- The door must be closed and immobile.
- Press button P1 for approximately 20 seconds until the LED flashes 1 sec.
- Release P1-

All the codes have been erased from the automation system memory. Input the new codes following steps 1-4

Fig. 49



1st button = 1st transmission channel with a unique “rolling” transmission code

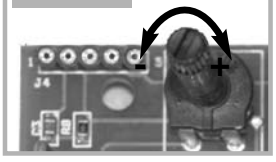
2nd button = 2nd transmission channel with the second unique “rolling” transmission code

13. Power adjustment

To adjust the automation system’s power in accordance with your door’s weight and friction in operation, use the RV1 trimmer on your automation system circuit board.
First perform an opening and closing operation to check whether the power is adequate for satisfactory operation (if the door stops before reaching the end of travel, the power must be increased)

- Turn RV1 anti-clockwise to reduce the power.
- Turn RV1 clockwise to increase the power.

Fig.50 **RV1**



14. Optional accessories

Ref. SW6500
Radio Keypad

Remote control
6203 rolling*

Switch
SW5000

wide-angle mirror
SW7950

set of photoelectric cells
SW7012

counterweighted canopy door accessory
992012

go to www.automaticgateshop to purchase optional accessories or spare parts.

15. Maintenance

Courtesy light
Replace your circuit board courtesy light with the following model:
Halogen bulb 20V 24W
Remote control batteries:
Battery life under average use = 2 years (not guaranteed)
Replace the battery with the following model:
12V type A23 - 5mA
Protection fuse:
In the event of a short-circuit or failure of the fuse, replace it with the following model:
5x20 mm 1A T fast fuse (see Fig. 40, page 14)**go to www.automaticgatesho**

16. Quick troubleshooting:

1) The automation system does not work at all:
- Check connection of 230 V power supply
- Check the protection fuse and replace if necessary
- Check the operation of the motor with a 'start' signal
- Check that the remote control code has been correctly stored in the automation system circuit board. If necessary, erase the circuit board memory and reinput the codes to the memory.

2) The door opens but will not close:
- Check that the photoelectric cell jumper is present and making a good connection if photoelectric cells are not installed.
- Check correct alignment of photoelectric cells (if installed) and that they are clean internally and externally

3) The automation system does not receive a signal from the remote control beyond a certain distance:
- There could be radio interference which can reduce the remote control transmission range.

4) The door does not stop in the desired position:
- Check the power setting (RV1)
- Check that there is no area of excessive friction when opening or closing the door (manual test)

MADE IN

18. Guarantee and After-Sales Service

This product is guaranteed against defects in materials or manufacture for a period of 24 months from the date of purchase. In the event of repair being required, the product must be returned to the supplier from whom it was purchased or to one of our authorised service centres. Only authorised technical service centres are recognised as qualified to perform repairs

DHAsrl

Via Agrate,99/7 20863 Concorezzo (MB) ITALY

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Conditions of warranty

1. The guarantee is accepted only if the guarantee certificate is completed in full and accompanied by the invoice or receipt as proof of purchase; furthermore, the certificate itself shall not be altered or defaced in any way.
2. DHA obligations are limited to the repair or, at its discretion, replacement of the product or any defective components.
3. The guarantee in respect of this product automatically becomes void if the product is modified and adapted to technical and safety standards other than those in force in the country for which the product is designed and manufactured. Therefore no compensation shall be payable in respect of damage arising out of the above-mentioned modifications.
4. This guarantee does not cover:

a) Periodic inspection, maintenance, repairs or replacement of worn parts.
b) Cost of transport, travel, or installation of the product.
c) Misuse, operating errors or incorrect installation.
d) Damage caused by fire, water, natural phenomena, storms, incorrect power supply or any other cause outside the manufacturer's control.

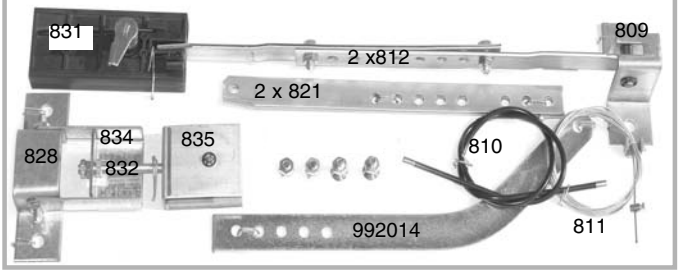
5. This guarantee does not affect the customer's legal rights in accordance with applicable national legislation in force, nor the customer's rights in relation to the supplier arising out of the sales and purchase contract. In the absence of applicable national legislation, this guarantee shall constitute the customer's sole recourse and neither the manufacturer nor his distributor shall be responsible in the event of accidental or consequential damage resulting from breach of the above-mentioned conditions of warranty

For information regarding after-sales service in your country, contact: service@allducks.it or visit www.allducks.it

19. Spare parts

To purchase spare parts, visit the **www.automaticgateshop.com** website or contact the After-Sales Service department.

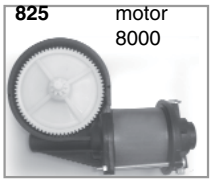
Fixing kit



Chain kit

839 Chain sprocket wheel

825 motor 8000



R403 UE transformer230V 105W

Rail kit

8500VT

Drive head complete with circuit board and transformer

CTH 29E